

**What is claimed is:**

**1. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container, which cargo is subject to shifting forces during transport, said apparatus for tensioning comprising:**

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**a torque rod having a first proximal end and a second distal end with a longitudinal channel extending through said torque rod from the distal end substantially along the length of said torque rod toward said first proximal end to form a tension mechanism having first and second tines operable to be position upon opposite sides of overlapped free ends of flexible load restraining strips,**

**10**

**said first and second tines having a channel spacing between said tines at the proximal end of said torque rod that is less than the channel spacing at the distal end of said torque rod;**

**15**

**a reaction arm connected to the proximal end of said torque rod for supporting said torque rod and ratchet rotation of said torque rod; and**

**20**

**a ratchet mechanism connected to the proximal end of said torque rod for selectively providing ratchet rotation of said torque rod to tension the flexible load restraining strips by twisting the overlapping free ends of the flexible load restraining strips and thereby drawing the load restraining strips together to tension said load restraining strips across a**

**load to be secured within a transport container.**

- 2. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

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**said first and second tines are coated on an exterior surface with polytetrafluoroethylene.**

- 3. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

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**said first and second tines are enrobed with a polytetrafluoroethylene coating.**

- 4. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

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**said first and second tines have a coating of polytetrafluoroethylene on the interior tine surfaces formed by the channel between said tines.**

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- 5. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

**said channel spacing between said first and second tines of said torque rod**

uniformly increases from the proximal end of said torque rod to the distal end of said torque rod.

6. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:

the width of said channel between said first and second tines at said closed end of said torque rod is approximately 0.3 inches and the width of said channel between said first and second tines at said distal end of said torque rod is approximately 0.4 inches.

7. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:

said first and second tines are semi-circular in cross-section.

8. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:

19. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 18 wherein:

9. An apparatus for tensioning flexible load restraining strips for use in

**securing cargo within a transport container as defined in claim 1 wherein:**

**the exterior configuration of said first and second tines, in cross-section, is generally hexagonal.**

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**10. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

**said torque rod is fabricated from titanium.**

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**11. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

**said torque rod is fabricated from a titanium and vanadium alloy.**

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**12. An apparatus for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 1 wherein:**

**said ratchet mechanism being operable to be set for selective rotation of said torque rod in either a clockwise or counterclockwise direction to tension the flexible load restraining strips across a load within a container.**

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**13. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container, which cargo is subject to shifting**

**forces during transport, said torque rod for tensioning comprising:**

5        **a rod having a first closed end and a second open end with a longitudinal channel extending through said torque rod from said closed end substantially along the length of said torque rod to said open end to form a torque rod having first and second tines operable to be position upon opposite sides of overlapped free ends of flexible load restraining strips,**

10        **said first and second tines having a channel spacing at the closed end of the torque rod that is less than the channel spacing at the open end of the torque rod, wherein**

15        **tension may be imparted to the flexible load restraining strips by twisting the overlapping free ends of the flexible load restraining strips with and around said torque rod and thereby drawing the load restraining strips together to tension said load restraining strips across a load to be secured within a transport container.**

20        **14.     A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 13 wherein:**

**said first and second tines being coated on an exterior surface with polytetrafluroethylene.**

**15. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 13 wherein:**

5                   **said first and second tines are enrobed with a polytetrafluoroethylene coating.**

**16. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 13 wherein:**

10                   **the channel spacing between said first and second tines of said torque rod increases linearly from said closed end of the torque rod to the open end of said torque rod.**

**17. A torque rod for tensioning flexible load restraining strips for use in**  
15 **securing cargo within a transport container as defined in claim 16 wherein:**

**the width of the channel between said first and second tines at said closed**  
                  **end of said torque rod is approximately 0.3 inches and the width of said**  
                  **channel between said first and second tines at said open end of said torque**  
20 **rod is approximately 0.4 inches.**

**18. A torque rod for tensioning flexible load restraining strips for use in**  
**securing cargo within a transport container as defined in claim 13 wherein:**

**said rod is generally cylindrical.**

**19. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 18 wherein:**

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**said first and second tines are semi-circular in cross section.**

**20. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 18 wherein:**

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**said first and second tines are generally rectangular in cross-section and the external configuration is approximately square.**

**21. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 18 wherein:**

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**the exterior cross-sectional configuration of said first and second tines together is generally hexagonal.**

**22. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 13 wherein:**

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**said torque rod is fabricated from titanium.**

**23. A torque rod for tensioning flexible load restraining strips for use in securing cargo within a transport container as defined in claim 13 wherein:**

**said torque rod is fabricated from a titanium and vanadium alloy.**